## **AMENDMENT**

## In the Claims

Please cancel claims 1-23 and 27-31 and amend the remaining claims as follows:

## 32. A synthetic derivative of a polyamine comprising structure 1:

where  $R_1$  is H, methyl, ethyl or propyl,  $R_2$  is H, methyl, ethyl or propyl, x is greater than 2 and less than 5 (2 < x < 5), and the sum of y + x is greater than 2 and less than or equal to 6 (2  $\leq$  y + x  $\leq$  6),  $R_3$  is an alkyl, keto, ether, thioether, phosphono or sulfonyl group; and L is a linker as defined in claim 24.

where  $R_1$  is H, methyl, ethyl or propyl,  $R_2$  is H, methyl, ethyl or propyl, x is greater than 2 and less than 5 (2 < x < 5), w is greater than 2 and less than 8 (2 < w < 8),  $R_3$  is an alkyl, keto, ether, thioether, phosphono or sulfonyl group; the sum of y + x is greater than or equal to 6 (2  $\leq$  y + x  $\leq$  6), and L is a linker as defined in claim 24.

- 39. The synthetic derivative of claim 38, wherein the chemical linker is a  $\alpha,\omega$ -diamine cross-linker.
- 41. The synthetic derivative of claim 38, wherein R<sub>1</sub> is H, x is 3 or 4, y is 3 or 4, and x + y is greater than 5 and less than 9.